

# Agromyzidae (Diptera) from Hong Kong

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**Abstract:** The 22 species of the Agromyzidae are recorded from Hong Kong, of which 5 species are new to science and 6 are new to Chinese fauna. Type specimens of *Melanagromyza squamifera* sp. nov., *Ophiomyia imparispina* sp. nov., and *Phytomyza redunda* sp. nov. are deposited in the National Science Museum, Tokyo, Japan and those of *Melanagromyza dipetala* sp. nov. and *Ophiomyia vasta* sp. nov. are deposited in the Bishop Museum, Honolulu, Hawaii, USA.

**Key words:** Diptera; Agromyzidae; Hong Kong; fauna; new species; new record; China

Although two species, *Ophiomyia fici* Spencer and Hill, 1976, and *Tropicomyia atomella* (Malloch, 1914), were recorded from Hong Kong in the preliminary list of Chinese Agromyzidae (Sasakawa and Fan, 1985), an introduction of *Ophiomyia lantanae* (Froggatt, 1919) to Hong Kong had been attempted in 1933 for the biological control of *Lantana* (Spencer, 1973). In this paper 22 species collected mainly in Kowloon are recorded, of which five species: two of the genus *Melanagromyza* Hendel, two of *Ophiomyia* Braschnikov and one of *Phytomyza* Fallén, are new to science, and six species are new to Chinese fauna.

## MATERIALS AND METHODS

Ten species studied here were collected by me in April 1965, as a member of the Japan-U. S. Co-operative Science Program. Twelve species were collected by staff of the Bishop Museum: W. J. Voss, Lee Kit Ming and Hui Wai Ming, in July 1964–Sept. 1965.

The holotypes of three new species are deposited in the collections of the Department of Zoology, National Science Museum (NSMT), Tokyo, and of two new species in the Bernice P. Bishop Museum (BPBM), Honolulu. Some paratype-specimens collected by myself are preserved in the Institute of Zoology, Chinese Academy of Sciences, Beijing. The dissected male genitalia of each specimen were stored in a short polyethylene tubule with glycerol. The terminology and abbreviations of certain bristles are the same as described by Sasakawa (1988).

## RESULTS

### 1. *Melanagromyza dipetala* sp. nov. (Figs. 1–3)

**Male.** Black; frontalia and thorax very sparsely grayish pollinose; parafrontalia shiny; mesoscutum and abdomen shining, the former faintly with metallic luster and the latter distinctly coppery; antenna slightly tinged with brown, arista brown. Wing hyaline; calypter white, with margin yellow and fringe whitish; halter brown.

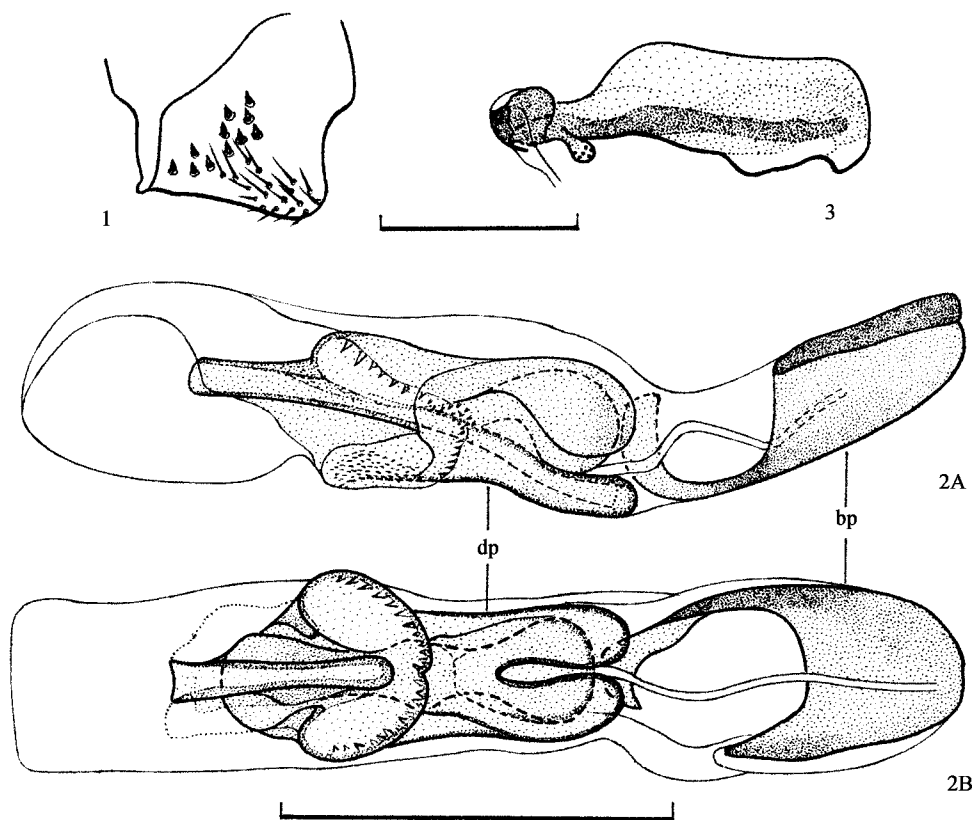
Frons 1.2–1.3 times as wide as eye, very slightly converging ventrally; parafrontalia not projecting above eye in profile, bearing two reclinate ors and two ori; oh reclinate, in row; oc 2/3 length of first ors; face with carina narrow but distinct on dorsal half; eye bare; gena narrow, 1/10 of eye height; first antennal flagellomere as long as broad, rounded apically; arista as long as height of eye, pubescent.

Mesoscutum with 0+2 dc, about 10 rows of acr, ipa nearly 1/2 of opa; katapisternum with two short setae before stpl. Wing: Costa extending to M<sub>1</sub>, with three sections in proportion of 3.4–3.8:1:0.8–0.9, r-m at middle of discal cell, ultimate section of M<sub>1</sub> thrice as long as penultimate, ultimate section of CuA<sub>1</sub> slightly longer than half of penultimate. Mid tibia with two pd.

S6 almost as long as wide, with shallow emargination posteriorly. Surstylus (Fig. 1) with irregular rows of 11 spines and a group of short setae at posterior corner. Hypandrium 350 µm long, with basal apodeme about 2/5 of whole hypandrial length. Phallus (Figs. 2: A, B) slightly shorter than 1/2 of phallapodeme (460 µm long), basiphallus incomplete U-shaped, distiphallus with spinulose membranous lobes, which are two-petaloid in ventral view, before base of distal tube. Ejaculatory apodeme (Fig. 3) weakly sclerotized, 175 µm long, 65 µm in greatest width.

Body length 1.7–2.1 (1.9 in holotype) mm,

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Figs. 1–3 Male genitalia of *Melanagromyza dipetala* sp. nov. (paratype)

1. Surstylus; 2. Phallus, lateral view (A) and ventral view (B), bp: basiphallus; dp: distiphallus; 3. Ejaculatory apodeme. Scale = 0.1 mm.

wing length 1.9–2.1 (2.0 in holotype) mm.

**Female.** Unknown.

**Holotype.** Male (BISHOP 16569), Hong Kong, Sai Kung Station, 30 Dec. 1964 (Voss & Hui). Paratypes: 1 ♂, same data as holotype; 1 ♂, same locality as holotype, 15 Feb. 1965 (Voss & Hui).

**Distribution.** China (Hong Kong).

**Remarks.** This species resembles Palearctic *M. cunctans* (Meigen, 1830) in the coloration of calypter and fringe, but is immediately recognizable by the coppery shining abdomen, the specific basiphallus with asymmetric lateral sclerites and distiphallus with the bi-petaloid membranous lobes (cf. phallus of *cunctans*: Spencer, 1966, figs. 13–15).

**Etymology.** The specific name refers to the spinulose bi-petaloid lobes on the distiphallus (Greek: *di* = two, *petalon* = leaf: petaloid).

## 2. *Melanagromyza squamifera* sp. nov. (Figs. 4–7)

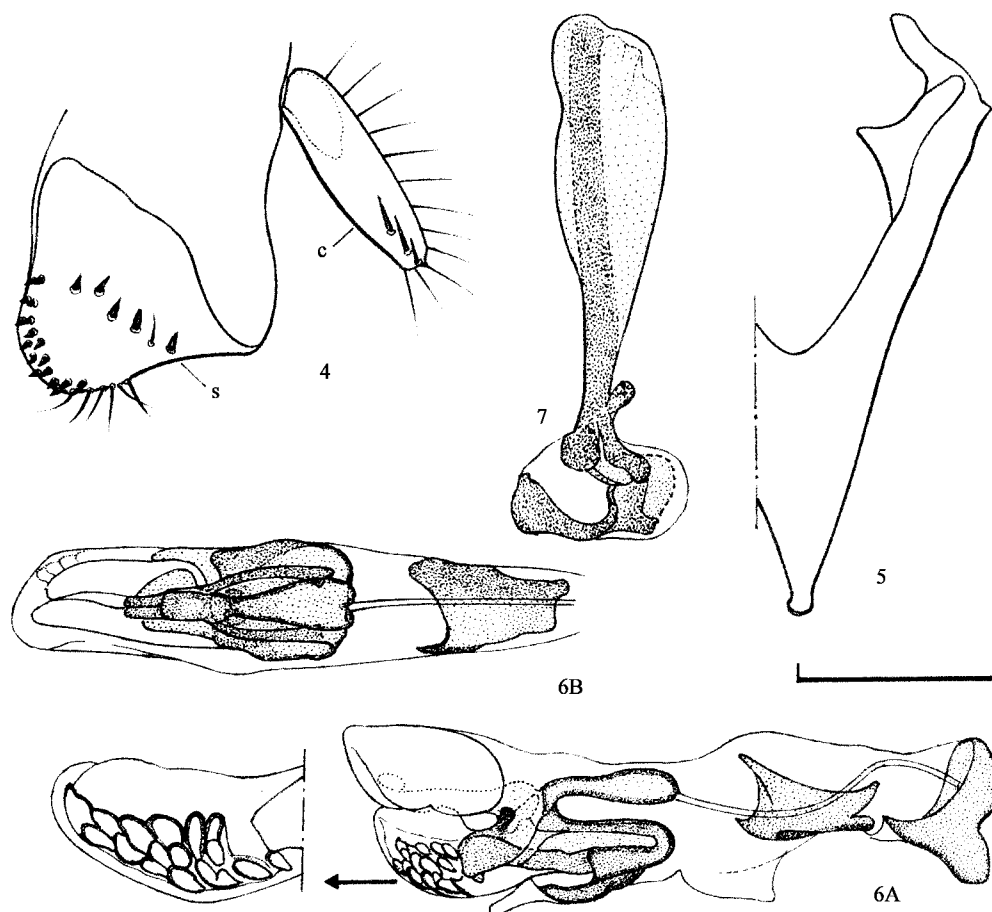
**Male.** Black; parafrontalia weakly shining; lunule grayish pruinose; mesoscutum with metallic luster, rarely bluish, sparsely grayish-dusted; abdomen brilliantly golden-coppery, rarely purplish, T6 bluish shining. Wing hyaline; calypter grayish white, with margin yellow and fringe white to pale yellow; halter dark brown, usually with yellow narrow area at base of

knob.

Frons 1.3–1.5 times as wide as eye, almost parallel-sided or slightly converging ventrally; parafrontalia not projecting above eye in profile, bearing two ors and two ori; oh reclinate, in row, but mingled with some hairs between bases of second ors and second ori; ocellar triangle with ventral apex extending midway between second ors and first ori, oc shorter than ors; eye 1.4–1.6 times as high as broad, with antero-dorsal patch of whitish hairs; gena 1/8–1/9 of eye height; first antennal flagellomere small, almost as long as wide; arista as long as eye height, microscopically pubescent.

Mesoscutum with 0+2 dc, 8(–10) rows of acr; katepisternum with two short setae before stpl. Wing: Costa extending to  $M_1$ , with sections in proportion of 4–4.3:1.3–1.5:1; r-m at middle or slightly beyond middle of discal cell, ultimate section of  $M_1$  2.8–3.5 times as long as penultimate, ultimate section of  $CuA_1$  slightly longer than 1/2 of penultimate. Mid tibia with two pd.

S6 four times as long as S5, incised at middle of posterior 1/4–2/3; S5 slightly narrower than S6, about four times as wide as long. Surstylus with a row of 3–5 spines in addition to two irregular rows of 16–21 marginal spines. Cercus with 2–4 stout setae on



Figs. 4–7 Male genitalia of *Melanagromyza squamifera* sp. nov. (paratype)  
4. Surstylus (s) and cercus (c); 5. Hypandrium (left half); 6A, B). Phallus; 7. Ejaculatory apodeme. See Figs. 1–3.

antero-ventral part. Hypandrium with side pieces broadly fused at bases, about 2/3 length of phallapodeme (450  $\mu$ m long); pregonite with five sensillae. Phallus slightly longer than hypandrium, 340  $\mu$ m long, basiphallalic sclerite small, distiphallus with ventral membranous lobe callused with scales. Ejaculatory apodeme weakly sclerotized, 225  $\mu$ m long, 65–75  $\mu$ m broad.

Body length 1.9–2.6 (2.4 in holotype) mm, wing length 1.8–2.3 (2.2 in holotype) mm.

**Female.** Similar to male, but T5 and T6 usually bluish shining; ocellar triangle larger, with ventral tip almost reaching to level of first ori; eye bare; body length 2.2–2.7 mm, wing length 2.1–2.5 mm.

**Holotype.** Male (NSMT), Hong Kong, Taipo Kau, 21 Apr. 1965 (Sasakawa). Paratypes: 4 ♂ 11 ♀ (1 copulating couple), same data as holotype.

**Distribution.** China (Hong Kong).

**Remarks.** This species is similar to Palaearctic *M. cunctans* (Meigen) and Oriental *M. sojoe* (Zehntner, 1900) in general appearance, but is distinguishable by the hairy eye in male, narrow gena, and the presence of two groups of spines on the surstylus and the scaly callus on the ventro-distal

membranous lobe of distiphallus. Also, this species resembles Oriental *M. cleomae* Spencer, 1961, in the presence of hairy patch on the male eye and two spinose groups on the surstylus, but is characterized by its large ocellar triangle, golden-coppery abdomen, and peculiar structure of phallus (cf. phallus of *cleomae*: Spencer, 1990, figs. 308–309).

**Etymology.** The specific name, formed from Latin *fera* (bears) and *squamos* (scale), refers to the presence of scaly callus on the distiphallus.

### 3. *Ophiomyia asparagi* Spencer

*Ophiomyia asparagi* Spencer, 1964: 782.

**Specimens examined.** 1 ♂ 1 ♀, Hong Kong, Taipo Kau, 4 Apr. & 21 Sept. 1965 (Lee & Hui).

This is a stem-miner of *Asparagus* (Asparagaceae), and has hitherto been known from Europe and Japan. New to China.

### 4. *Ophiomyia chinensis* Sasakawa

*Ophiomyia chinensis* Sasakawa, 1988: 53.

**Specimen examined.** 1 ♂, Hong Kong, Sai Kung, 22 Apr. 1965 (Sasakawa).

This species was recorded from Lung-chii-pa, Hupeh Prov. It is distinctive in having the short

vibrissal fasciculus, elongate proboscis and shortly bifurcate ventral processes of the distiphallus.

### 5. *Ophiomyia conspicua* (Spencer)

*Melanagromyza conspicua* Spenceer, 1961: 71.

**Specimens examined.** 3 ♂, Hong Kong, Taipo Kau, 21 Apr. 1965 (Sasakawa).

This species is widely distributed in the Oriental region and the Australasian/Oceanian regions, but has not been recorded from the mainland of China.

### 6. *Ophiomyia imparispina* sp. nov. (Figs. 8–10)

**Male.** Black; parafrontalia weakly shining; lunule dark brown; thorax and abdomen weakly shining, mesoscutum sparsely brownish-dusted. Wing hyaline, veins pale brown; calypter gray, brownish basally, with margin and fringe dark brown; halter dark brown.

Frons 1.3–1.4 times as wide as eye; parafrontalia not projecting above eye in profile, bearing two reclinate ors and two incurvate ori; oh reclinate, in row; oc slightly longer than first ors; lunule low, less than 1/4 of frontal length; eye 1.5 times as high as broad; gena 1/4–1/5 of eye height, not projecting forwards, forming angle of 80°; vibrissal fasciculus long but shorter than arista (12:14), with distinct curvature; face with carina moderately broad and raised below antennal bases; first antennal flagellomere small, round, with distinct pile; arista appearing bare (microscopically pubescent).

Mesoscutum with 0 + 2 dc, eight dense rows of acr. Wing: Costa extending to  $M_1$ , with sections in proportion of 3.8:1:0.9, r-m distinctly beyond middle of discal cell, ultimate section of  $M_1$  5–5.6 times as long as penultimate, ultimate section of  $CuA_1$  shorter than penultimate (1.6–1.8:2). Mid tibia without or with one short pd.

S5 1.7 times as wide as long, incised at middle of posterior 1/3. Cercus 2/3 as high as epandrium, with about 15 setae densely on antero-ventral part. Surstylus with one strong spine at postero-distal corner and 6–7 short spines near ventral margin. Hypandrium about 1/2 length of phallapodeme (620  $\mu$ m long), distinctly curved on basal apodeme (about 1/3 length of side piece). Phallus including epiphallus 380  $\mu$ m long, distiphallus as shown in Figs. 10(A, B). Ejaculatory apodeme ovoid, 260  $\mu$ m long, 150  $\mu$ m in greatest width.

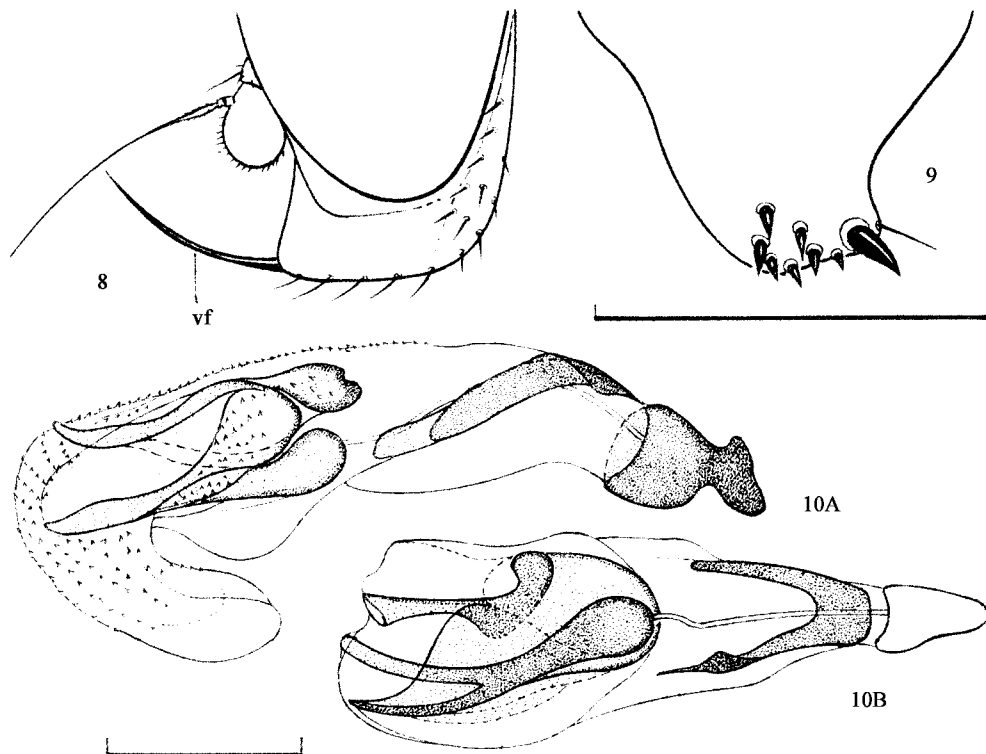
Body length 1.9–2.2 (2.1 in holotype) mm, wing length 2.0–2.2 (holotype) mm.

**Female.** Similar to male, but abdomen shiny, oh in dense row, vi normal.

**Holotype.** Male (NSMT), Hong Kong, Sai Kung, 22 Apr. 1965 (Sasakawa). Paratypes: 2 ♂ 3 ♀, same data as holotype.

**Distribution.** China (Hong Kong).

**Remarks.** This species generally resembles *O. buccata* Hering, 1931, known from Austria, and *O. kwansonis* Sasakawa, 1961, known from Japan, in



Figs. 8–10 Head and male genitalia of *Ophiomyia imparispina* sp. nov. (paratype)

8. Ventral part of head, vf: vibrissal fasciculus; 9. Surstylus; 10(A, B). Phallus.

having the blunt vibrissal angle and the long ultimate section of  $CuA_1$ . However, the characteristic features of this species are the small size, the long and slender vibrissal fasciculus, the presence of the distinct pile on the first antennal flagellomere and irregular-sized spines on the surstylus.

**Etymology.** The specific name refers to the characteristic spines on the surstylus (Latin: *imparilis* = unequal, *spina* = thorn).

**7. *Ophiomyia vasta* sp. nov.** (Figs. 11 – 12)

**Male.** Black; parafrontalia weakly shining, ocellar triangle shiny; thorax and abdomen strongly shining. Wing hyaline; calypter brownish gray, with margin and fringe dark brown; halter dark brown. Legs black, tibiae and tarsi slightly brown-tinged.

Frons 1.5 – 1.7 times as wide as eye; parafrontalia slightly or not projecting above eye in profile, bearing two reclinate ors and two ori (first curving inwards and slightly upwards; second inwards); oh distinct, reclinate, in row; ocellar triangle rather large, with ventral tip extending to level of second ors; gena 1/6 – 1/7 of eye height, not projecting forwards, without vibrissal fasciculus, vi longer than 4 – 5 pm; lunule with median furrow just above bases of antennae; face with carina very narrow but raised sharply just below antennal bases; first antennal flagellomere slightly shorter than broad, rounded apically, with distinct pile; arista slightly shorter than eye height, microscopically pubescent.

Mesoscutum with 0 + 2 dc, six rows of acr, ipa 1/4 length of opa; katapisternum with one short seta before stpl. Wing: Costa extending to  $M_1$ , with sections in proportion of 3 – 3.3:0.9:0.7 – 0.8; r-m distinctly beyond middle of discal cell, ultimate section of  $M_1$  4.3 – 5.5 times as long as penultimate, ultimate section of  $CuA_1$  slightly longer than 1/2 of penultimate

(1:1.7 – 1.8). Mid tibia with one short pd.

S6 about 1/2 as long as broad, thrice as long as S5, with median excavation on posterior quarter. Surstylus with 15 – 17 spines at posterior corner and 3 – 4 pale minute spinulae along margin. Cercus slightly higher than 1/2 of epandrial height. Hypandrium nearly 3/5 length of phallapodeme (500  $\mu$ m long), with basal apodeme only 1/4 length of side piece; pregonite with five sensillae. Phallus almost as long as hypandrium, basiphallus with lateral narrow sclerites connected with bridge before distal end, distiphallus with vacuolate lobe before end and longitudinal membranous lobe on ventral side. Ejaculatory apodeme 210  $\mu$ m long, 90  $\mu$ m in greatest width.

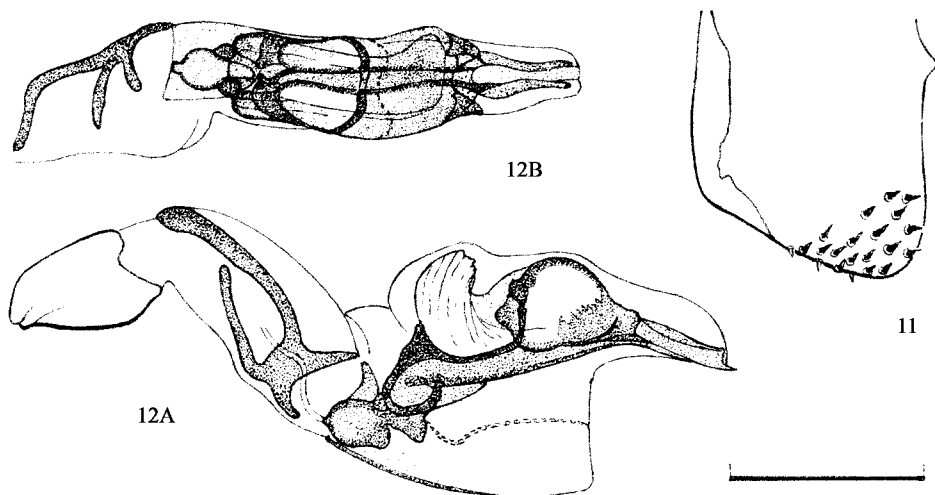
Body length 1.3 – 1.9 (1.4 in holotype) mm, wing length 1.4 – 1.7 (holotype) mm.

**Female.** Similar to male, but facial carina lower and shorter than that of male; wing length 1.6 – 1.7 mm.

**Holotype.** Male (BISHOP 16570), Hong Kong, Sai Kung Station, N. T., 8 Jan. 1965 (Voss & Hui). Paratypes: 4 ♂ 1 ♀, same locality as holotype, 12 Jan. 1965, 6 Oct., 10 Dec. & 30 Dec. 1964 (Voss & Hui); 1 ♂, Hong Kong, Taipo Kau, N. T., 20 June 1965 (Lee); 1 ♂, Hong Kong, Taipo Kau, 20 Aug. 1965 (Lee & Hui, light trap); 1 ♀, Hong Kong, Taipo Kau, 9 July 1965 (Lee & Hui, Malaise trap).

**Distribution.** China (Hong Kong).

**Remarks.** This species is similar to Palearctic *O. pulicaria* (Meigen, 1830) in general appearance and structure of the basiphallus, but is distinguishable by the small size, shorter ultimate section of  $CuA_1$  and longer distiphallus with peculiar lobes on the dorsal and ventral sides. The shape of basiphallic sclerite is similar to that of *O. suavis* Spencer, 1966 (figs. 90 – 91), which belongs to the *beckeri-pulicaria*-group, but the chaetotaxy, wing venation and structure of the



Figs. 11 – 12 Male genitalia of *Ophiomyia vasta* sp. nov. (paratype)

11. Surstylus; 12 A, B). Phallus.

distiphallus are quite different from each other. Also, it differs from Oriental *O. centrosematis* (de Meijere, 1940) with short wing by its distinctive phallus.

**Etymology.** The specific name refers to the vacuolate lobe on the distiphallus (Latin: *vastus* = empty).

#### 8. *Agromyza latipennis* Malloch

*Agromyza latipennis* Malloch, 1914: 321; Sasakawa, 1972: 46.

**Specimens examined.** 3 ♂ 1 ♀, Hong Kong, Sai Kung Station, 12, 24 & 28 Mar. 1965 (Voss & Hui); 1 ♂ 2 ♀, Hong Kong, Taipo Kau, 21 Apr. 1965 (Sasakawa).

The distinctive character of this small species (wing 1.8–2.1 mm in length) is the long pubescence on the first antennal flagellomere. Male genitalia: See Sasakawa, 1972, fig. 2). New to the mainland of China.

#### 9. *Japanagromyza cercariae* Sasakawa

*Japanagromyza cercariae* Sasakawa, 1963: 26.

**Specimen examined.** 1 ♂, Hong Kong, Taipo Kau, 26 June 1965 (Lee & Hui).

This species is known to occur in Viet Nam, and is quite specific in having the broad cercus with 1–2 spines on the anterior distal apex, and a pair of long, membranous distal tubules on the distiphallus. New to China.

#### 10. *Japanagromyza tristella* (Thomson)

**Specimens examined.** 1 ♂, Hong Kong, Taipo Kau, 8 June 1965 (Lee & Hui, Malaise trap); 2 ♂, Hong Kong, Sai Kung Station, 15 & 30 Dec. 1964 (Voss & Hui).

This is the well-known leaf-miner of the leguminous plants in China (Malloch, 1914; Sasakawa, 1972; Sasakawa and Fan, 1985) and widely distributed in the Oriental region.

#### 11. *Amauromyza* (*Amauromyza*) *aliena* (Malloch)

**Specimen examined.** 1 ♂, Hong Kong, Tai Mong Tsai, 22 Apr. 1965 (Sasakawa).

This is a leaf-miner of *Callicarpa formosana* (Verbenaceae) in Taiwan. Characters of male and female genitalia, immature stages and leaf-mine: See Sasakawa, 1972, figs. 22–28.

#### 12. *Cerodontha* (*Icteromyza*) *duplicata* (Spencer)

**Specimen examined.** 1 ♂, Hong Kong, Sai Kung Station, 10 Oct. 1964 (Voss & Hui).

This Oriental species is newly recorded from the mainland of China. Characters and synonymy: See Sasakawa, 1988.

#### 13. *Cerodontha* (*Dizygomyza*) *vietnamensis* (Sasakawa)

*Phytobia* (*Dizygomyza*) *vietnamensis* Sasakawa, 1963: 45.

**Specimen examined.** 1 ♀, Hong Kong, Taipo Kau, 3 Aug. 1965 (Lee & Hui).

This species is characteristic in having the postero-dorsal bristle on the mid tibia and spinulae on the membranous apex of ventral process on the phallus. New to China.

#### 14. *Liriomyza bryoniae* (Kaltenbach)

**Specimen examined.** 1 ♀, Hong Kong, Taipo Kau, 9 July 1965 (Lee & Hui, Malaise trap).

This highly polyphagous leaf-miner is known as a serious pest on tomatoes and cultivated cucurbits in Europe and Japan.

#### 15. *Liriomyza ptarmicae* de Meijere

*Liriomyza ptarmicae* de Meijere, 1925: 286 & 291.

**Specimen examined.** 1 ♀, Taipo Kau, 27 July 1965 (Lee & Hui).

This species is characterized by the whitish long pile on the brownish-darkened first flagellomere of antenna; male genitalia: Sasakawa, 1994, fig. 5; larval host plants: *Achillea*, *Artemisia* and *Chrysanthemum* spp. New to China.

#### 16. *Liriomyza pusilla* (Meigen)

**Specimens examined.** 3 ♂ 5 ♀, Hong Kong, Sai Kung, 22 Apr. 1965 (Sasakawa).

This leaf-miner of Asteraceae is widely distributed throughout Europe and Asia. Male genitalia: See Sasakawa, 1994, fig. 1.

#### 17. *Liriomyza sonchi* Hendel

*Liriomyza sonchi* Hendel, 1931: 247.

**Specimens examined.** 2 ♀, Hong Kong, Sai Kung, 22 Apr. 1965 (Sasakawa).

This Palaearctic species is characterized by the entirely yellow postorbits and long ultimate section of CuA<sub>1</sub> (three times as long as penultimate). The larval host plants are known as *Sonchus* spp. in Europe. New to China.

#### 18. *Phytoliriomyza arctica* (Lundbeck)

**Specimen examined.** 1 ♀, Hong Kong, Sai Kung Station, 31 Mar. 1965 (Voss & Hui).

This is one of the semicosmopolitan species, and the larva is the stem-miner of Asteraceae: *Sonchus*, *Solidago* spp. etc. New to the mainland of China.

#### 19. *Pseudonapomyza malayensis* Spencer

*Pseudonapomyza malayensis* Spencer, 1973: 272.

**Specimens examined.** 1 ♂ 1 ♀, Hong Kong, Taipo Kau, 17 July 1964 & 29 Apr. 1965 (Voss & Hui); 2 ♂ 1 ♀, Hong Kong, Yueng Long District, Castle Peak, Forestry Station area, 29 July & 6 Aug. 1964 (Voss); 1 ♀, Hong Kong, Castle Peak, 29 July 1964 (Voss & Hui); 1 ♂, Hong Kong, Trappist Monastery to Silver Mine Bay (over hills), Lantau I., 24 Aug. 1964 (Voss).

This species was described by a single male reared from larva mined in the leaf of Bermuda grass in Malaya. It has the finely pointed first antennal

flagellomere and the densely spinulose latero-proximal lobes on the distiphallus. New to China.

## 20. *Pseudonapomyza quatei* Sasakawa

*Pseudonapomyza quatei* Sasakawa, 1963 : 48.

**Specimens examined.** 4 ♂ 8 ♀, Hong Kong, Sai Kung Station, 6 & 25 Nov., 7, 9 & 15 Dec. 1964; 8 Jan., 19 Feb. & 20 Apr. 1965 (Voss & Hui); 1 ♂, Hong Kong, Castle Peak, Forestry Station area, 6 Aug. 1964 (Voss); 5 ♂, Hong Kong, Trappist Monastery to Silver Mine Bay (over hills), Lantau I., 22 – 24 July 1964 (Voss).

This species was described by a single male collected in Viet Nam (host plant unknown). It has the bluntly angulated dorso-apical angle on the first antennal flagellomere and the claw-like process on the ventro-proximal side of distiphallus. New to China.

## 21. *Phytomyza redunca* sp. nov. (Fig. 13)

**Male.** Head yellow but ocellar triangle, postorbit and postgena blackish brown, both vt growing on dark area, antennal groove brown on mesal half; antenna and palpus black, arista brown. Thorax and abdomen black, scutellum and anterior abdominal tergites slightly brown-tinged; mesoscutum mat, sparsely grayish pollinose; humerus and notopleuron pale brown; anepisternum with distinctly or indistinctly yellow dorsal margin. Wing hyaline; calypter with margin and fringe brown. Legs blackish brown, fore knee narrowly yellow.

Frons 1.5 times as wide as eye; parafrontalia not projecting above eye in profile; ors two, first shorter than second; ori one (one additional setula on one side); lunule crescent; eye 1.3 times as high as broad; gena 1/5 of eye height; pm four; first antennal flagellomere as long as wide, 1.5 times as wide as genal height, rounded apically, with whitish pile relatively long; arista pubescent.

Mesoscutum with 1 + 3 dc, two rows of acr before

suture and 3 – 4 sparse rows behind suture, ending just behind level of third dc, 3 – 6 postsutural ia-setulae, ipa nearly 1/3 length of opa. Wing: Second costal section 3.5 times as long as fourth.

Surstylus slightly projected, densely setose. Hypandrium about 1/2 length of phallapodeme (600  $\mu$ m long). Phallus longer than phallapodeme, with eight spinules (not chitinized at bases) on dorsal membrane above base of distiphallus; ventral process long, forming loop, minutely spinulose on surrounding membrane; distiphallus composed of two long tubules, curving up- and backwards. Ejaculatory apodeme 130  $\mu$ m long, 145  $\mu$ m in greatest width.

Body length 1.7 mm, wing length 1.9 mm.

**Female.** Unknown.

**Holotype.** Male (NSMT), Hong Kong, Taipo Kau, 21 Apr. 1965 (Sasakawa); abdomen and genitalia in polyethylene tubule.

**Distribution.** China (Hong Kong).

**Remarks.** This species is similar to *P. latifolii* Groschke, 1957, known from Germany, in having the single ori, centrally infuscated face, dark lateral side of mesoscutum, but is larger (1.2 mm in *latifolii*) and provided with the distinct spinules on the dorsal membrane of phallus. The mesophallus and distiphallus of this new species show a number of similarities with those of the species of *angelicae*-group in the structures (such as the mesophallus similar to that of *P. angelicae* Kaltenbach, 1874, and the distiphallus to that of *latifolii*), but the phallus is spinulose on dorsal membrane as well as in the species of *albiceps*-group, while bare in the *angelicae*-group (cf. Griffiths, 1973, figs. 20 – 31).

**Etymology.** The specific name refers to a pair of curved tubules of distiphallus (Latin: *reduncus* = curved back).

## 22. *Chromatomyia horticola* (Goureau)

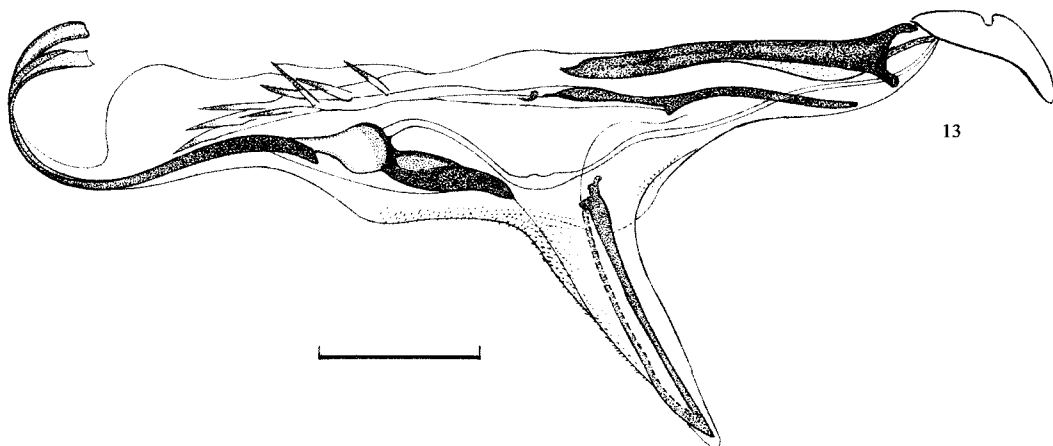


Fig. 13 Phallus (lateral view) of *Phytomyza redunca* sp. nov. (holotype)

**Specimen examined.** 1 ♂, Hong Kong, Taipo Kau, 21 Apr. 1965 (Sasakawa).

This is one of the commonest and polyphagous pests of the cultivated plants in Asia.

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# 香港潜蝇科(双翅目)的分类研究

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**摘要:**报道了香港 22 种潜蝇科昆虫,其中包括 5 新种、6 个中国大陆新记录种。新种模式标本分藏于下列两处:  
*Melanagromyza squamifera* sp. nov., *Ophiomyia imparispina* sp. nov., *Phytomyza redunca* sp. nov. 的模式标本保存于日本东京自然博物馆;  
*Melanagromyza dipetala* sp. nov., *Ophiomyia vasta* sp. nov. 的模式标本保存于美国夏威夷比肖普博物馆。

**关键词:**双翅目;潜蝇科;香港;动物区系;新种;新记录;中国

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